

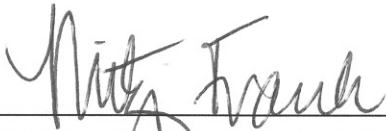
WORK PLAN (FY 2005) FOR INVENTORIES AND VITAL SIGNS MONITORING

FY 2004 – FY 2005

SOUTHERN PLAINS INVENTORY AND MONITORING NETWORK

Includes: Alibates Flint Quarries National Monument, Bent's Old Fort National Historic Site, Capulin Volcano National Monument, Chickasaw National Recreation Area, Fort Union National Monument, Fort Larned National Historic Site, Lake Meredith National Recreation Area, Lyndon B. Johnson National Historical Park, Pecos National Historical Park, Sand Creek Massacre National Historic Site, and Washita Battlefield National Historic Site.

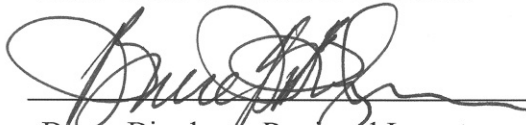
Southern Plains Network Approval Signatures



Mitzi Frank, Superintendent, Fort Union National Monument,
2005 Chair of Board of Directors

2-22-05

Date



Bruce Bingham, Regional Inventory and Monitoring Coordinator,

3/8/2005

Date



Dustin Perkins, Southern Plains Network Coordinator
Intermountain Region

2-28-05

Date

PREFACE

This monitoring plan is being submitted later than anticipated due to an unforeseen and late change in our budget amount for FY2005. The I+M program granted the Southern Plains Inventory and Monitoring Network (SOPN) an extension for the submittal of this report. SOPN was originally in the National Park Service (NPS) Budget for full funding in FY05. We used this fully funded amount (\$389,000 in Vital Signs) for our discussions of the draft work plan at our annual meeting in August 2004, for our draft FY2005 Workplan that was submitted in October 2004, and in preparation of our Final FY2005 Workplan that had been approved by the network and signed by the Chair of the Board of Directors. Congress then approved a NPS budget that only included an increase of \$3.6 million to the Natural Resource Challenge, as opposed to the \$4.6 million requested. Despite this lower amount, the Inventory and Monitoring Advisory Council decided at their December 1-3 meeting that SOPN would still receive full funding in FY2005. Based on being informed of that decision, SOPN then proceeded on several partnerships that included SOPN using the fully funded amount to match outside funding sources. On January 7, 2005, we were told that we would not be receiving full funding, but instead would receive \$225,700, a decrease of \$163,300. This change in the budget has resulted in a delayed workplan and has not been beneficial as we try to establish and build partnerships and leverage dollars with non-governmental and governmental entities.

I. Overview and Objectives

The Southern Plains Inventory and Monitoring Network (SOPN) includes eleven national parks with significant natural resources in Colorado, Kansas, New Mexico, Oklahoma, and Texas. Ten of these parks have been in the network since its inception. An eleventh park, Sand Creek Massacre NHS (SAND), (for complete list of park abbreviations see Table 1) is a recent addition to the National Park Service (NPS) and SOPN. SOPN has not yet been allocated inventory or vital signs monitoring funds for SAND.

Table 1. List of abbreviations and affiliations for the 11 SOPN parks.

Park Name	State	Region	Abbreviation
Alibates Flint Quarries National Monument	Texas	Intermountain	ALFL
Bent's Old Fort National Historic Site	Colorado	Intermountain	BEOL
Capulin Volcano National Monument	New Mexico	Intermountain	CAVO
Chickasaw National Recreation Area	Oklahoma	Intermountain	CHIC
Fort Larned National Historic Site	Kansas	Midwest	FOLS
Fort Union National Monument	New Mexico	Intermountain	FOUN
Lake Meredith National Recreation Area	Texas	Intermountain	LAMR
Lyndon B. Johnson National Historical Park	Texas	Intermountain	LYJO
Pecos National Historical Park	New Mexico	Intermountain	PECO
Sand Creek Massacre National Historic Site	Colorado	Intermountain	SAND
Washita Battlefield National Historic Site	Oklahoma	Intermountain	WABA

SOPN is scheduled to receive its \$225,700 in vital signs funding in FY05. SOPN will complete grassland conceptual models in FY05. We had hoped to also develop or refine other network's models for pinion-juniper, eastern deciduous forests, and wetlands. However, due to unexpected funding cuts, we may not be able to complete these models in FY05. During model development SOPN will hold workshops to allow for staff from SOPN parks and subject matter experts to review drafts of the conceptual model. At these workshops we will use the conceptual models and their review as a framework to develop potential vital signs for each of the natural resources and stressors that have been included in an access database. All of this information will be incorporated into the Phase I report due in October, 2005. SOPN will also prepare for the Phase II report by identifying the vital sign selection process. SOPN had originally planned to complete NPSpecies certification in FY05. Due to the budget cuts, we now plan to certify the vertebrates and push back vascular plants until FY2006.

SOPN will receive its first year of water quality money (\$29,000) in FY05. SOPN has already identified major water quality issues and has gathered water quality information from each park during scoping activities in FY04. SOPN will continue gathering information about significant water bodies within the network. In FY05 SOPN will establish task agreements to develop conceptual models for riverine and reservoir systems. We will hold workshops with park staff and subject matter experts to review the draft conceptual models and identify potential vital signs for water quality.

SOPN Objectives for Biological Inventories:

1. Locate and catalog existing park natural resource documents, data sets, and spatial information and ensure that information is readily available.
2. Continue conducting inventories to reach the Servicewide goal of documentation for 90% of the vertebrate animal and vascular plant species within the network parks.
3. Continue to evaluate status and identify data gaps within the core set of natural resource inventories for network parks, and conduct investigations of these gaps and species of special concern to network parks.

SOPN Objectives for Vital Signs Monitoring:

1. Hire and retain professional staff and secure office space and facilities that provide a safe, healthy, and productive environment.
2. Develop and maintain working and decision-making processes that engages technical staff and managers of network parks.
3. Implement and maintain an integrated GIS and data management program.
4. Summarize and analyze existing information and concepts important for assessing current and future monitoring efforts and needs in the network parks.
5. Identify and prioritize all aquatic indicators (including climatic and atmospheric), including the water quality component of the monitoring plan, and develop protocols and implement programs to monitor the Vital Signs.

6. Identify and prioritize all terrestrial indicators (including climatic and atmospheric indicators), and develop protocols implement programs to monitor Vital Signs.
7. Develop and maintain strategies to share information with network parks, scientists, and others interested in the network's I&M program.

II. Scheduled Activities (FY2005)

A. Biological Inventories

Objective 1 Locate and catalog existing park natural resource documents, data sets, and spatial information and ensure that information is readily available.

Task A1.1- NPSpecies Data Entry

- Scheduled FY 2005 Activities and Products: Finish data entry from inventory reports. Fix and clean existing data in NPSpecies database. In order to efficiently use inventory funding, the SOPN board had previously decided inventory funding for the smaller parks should focus efforts on field inventories and not towards NPSpecies data entry. This decision was supported by WASO I+M who promised to assist with data entry in future years, beginning in FY05.

Task A1.2 – Hold NPSpecies Certification Workshops

- Scheduled FY 2005 Activities and Products: After completing data entry, SOPN will initiate certification for vertebrates. The SOPN plans to follow I+M guidelines for holding these workshops.

Objective 2 Continue conducting inventories to reach the Servicewide goal of documentation for 90% of the vertebrate animal and vascular plant species within the network parks.

Task A2.1- Vascular Plant Inventory

Parks involved: WABA, LYJO, LAMR, and ALFL

- Scheduled FY 2005 Activities and Products: Complete final reports at LAMR, ALFL, and WABA. These final reports are each more than a year overdue. SOPN has commented on at least two versions of these plant reports and they are nearing completion. Enter data from inventories into NPSpecies database for FOUN, SAND, WABA, and FOLS. Fund vascular plant inventory at SAND. This new park has essentially no natural resource information. SOPN does not know when or if it will receive inventory money for this park. However an inventory of plants that includes a species list and the vegetation communities present at SAND is essential for future inventories and vital signs monitoring development. There is also the potential for streaked ragweed (*Ambrosia linearis*), an endemic known from only 6 locations in the world, to be present at this park. SOPN will seek alternate sources of funding to initiate this plant inventory in order to minimize the money that will be “borrowed” from the vital signs funding for the original 10 parks.

Task A2.2- Mammal Inventory

Parks involved: CHIC, LYJO, LAMR, FOLS, SAND, and ALFL

- Scheduled FY 2005 Activities and Products: Complete final reports for LAMR, ALFL, LYJO, and CHIC (the last 2 have already been completed this fiscal year). These other two reports are each more than a year overdue. SOPN has commented on at least two versions of these reports and they are nearing completion. Enter data from inventories into NPSpecies database for CHIC and FOLS.

Task A2.3- Bird Inventory

Parks involved: CHIC, LAMR, ALFL, WABA, FOLS, and SAND

- Scheduled FY 2005 Activities and Products: Complete final reports for LAMR, ALFL, WABA, and CHIC (CHIC already completed in FY05). The reports for LAMR and ALFL are more than a year overdue but they are the final stages of completion. The WABA report is a park-funded project, but SOPN is assisting with the completion. Complete data entry from inventories into NPSpecies database for SAND, CHIC, WABA and FOLS. Complete field season and final report for SAND with Rocky Mountain Bird Observatory.

Task A2.4- Herptile Inventory

Parks involved: CHIC, LYJO, LAMR, ALFL, and FOLS

- Scheduled FY 2005 Activities and Products: Complete final reports for LAMR, ALFL, LYJO and CHIC (the latter two have already been completed in FY05). The other two final reports are each more than a year overdue. SOPN has commented on at least two versions of these reports and they are nearing completion. Enter data from inventories into NPSpecies database for CHIC and FOLS.

Task A2.5- Fish Inventory

Parks involved: FOLS, LYJO, LAMR, and WABA

- Scheduled FY 2005 Activities and Products: Complete final report for LAMR and LYJO (LYJO already complete in FY05). The LAMR report is more than a year overdue. SOPN has commented on at least two versions of this report and it is nearing completion. Enter data from inventories into NPSpecies database for WABA and FOLS. LYJO has arranged for a deep-water fish inventory to be conducted in FY2005 by the Lower Colorado River Authority at no cost to SOPN or LYJO. This deep-water area was missed in original inventories due to funding constraints.

Objective 3 Continue to evaluate status and identify data gaps within the core set of natural resource inventories for network parks, and conduct investigations of these gaps and species of special concern to network parks.

Task A3.1- Collate inventory information from SOPN parks

- Scheduled FY 2005 Activities and Products: Analyze any new inventories completed in FY2005 for completeness, and review and update the prioritized inventory needs lists for the original 10 parks and for SAND.

Task A3.2- Fill Inventory Gaps

- Scheduled FY2005 Activities and Products: Fund an intensive inventory of the arch wetland at BEOL. According to park staff this wetland did not receive enough attention in the initial inventory, and this wetland has a high likelihood of being incorporated into the vital signs monitoring program. This inventory will focus on hydrology, plants, birds, fish, amphibians, and invertebrates in this rare ecosystem in southeastern Colorado.

Task A3.3- Search and plan for SAND inventory funding

- Scheduled FY 2005 Activities and Products: SOPN decided to only pursue inventories at SAND that were deemed essential in developing a vital signs monitoring program for this park and wait to complete non-essential inventories if and when we are allocated additional inventory funding for this park. These essential inventories were vascular plants, birds, and rare mammals. We have already submitted a proposal and received funding (\$10,000) for a plant inventory at SAND from the Rocky Mountain CESU for FY2005. We will match this award with approximately \$13,000 to complete a plant inventory and do field reconnaissance for a vegetation map. We are working with Chris Lea to ensure that we are efficient with this cooperative agreement and fulfill both inventory and vegetation mapping goals. Will submit proposals for an inventory rare species at SAND to the Servicewide Comprehensive Call (this project was funded and will be initiated in FY2006). Continue consulting with Colorado Division of Wildlife for partnership opportunities for these rare species. Complete field season and finish SAND bird inventory with Rocky Mountain Bird Observatory at SAND.

Task A3.4 – Vegetation Mapping Inventories

- Scheduled FY2005 Activities and Products: SOPN had decided that these maps are a high priority and that SOPN would allocate approximately \$40,000 to the vegetation mapping program. Conversations were conducted with the vegetation mapping program to determine what will be completed in FY05. Since the budget cuts have occurred we have informed the vegetation mapping program that we have no money to contribute to this project in FY05. However, some work may be initiated at no cost to SOPN since SOPN staff and individual park staffs are willing to assist the vegetation mapping program with logistical details and some field work.

B. Vital Signs Monitoring

Objective 1 Hire and retain professional staff and secure office space and facilities that provide a safe, healthy, and productive environment.

Task B1.1- Establish network positions and office(s)

- Scheduled FY 2005 Activities and Products: Establish a cooperative agreement to fund a Ph.D. student at University of Colorado under Dr. Tim Seastedt. This student will assist with Vital Signs development as a part-time network ecologist and eventually develop protocols as part of their dissertation. The University of Colorado plans to contribute approximately \$34,000 (63% of project) of salary for the student

and the advisor as part of the partnership. A partnership was established with the Gulf Coast CESU and Texas A+M University in FY2004 to provide student interns assist with library research and associated tasks. One student has started work, and we may hire one additional intern in FY05. Revise and finalize staffing plan that will be used through the final approval of the Phase III report in October, 2008.

Task B1.2- Ensure staff receive proper training and are updated with the most recent biological information.

- FY 2005 Activities and Products: Data manager plans to attend George Wright Society, national I+M meeting and other relevant training opportunities. Network Coordinator plans to attend national I+M meeting, CENTRUS NEON Planning Meeting, Fundamentals V in Harpers Ferry, WV, two IMR I+M sponsored workshops, supervisor training and other relevant training opportunities.

Objective 2 Develop and maintain working and decision-making processes that engages technical staff and managers of network parks.

Task B2.1- Coordinate network activities

- Scheduled FY 2005 Activities: Hold FY2005 annual meeting in August, 2005. Elect a new chair of the board. Continue to hold necessary conference calls with technical committee and board for relevant SOPN decisions. Continually update webpage.

Objective 3 Implement and maintain an integrated GIS and data management program.

Task B3.1- Ensure efficient and central location for data entry and certification

- Scheduled FY 2005 Activities: Continue to build Procite library database of all relevant SOPN documents (reports, peer-reviewed literature). Complete current data entry for NPSpecies. Hold NPSpecies certification workshops. Develop plan for future NPSpecies data entry and revisiting certification. Develop project tracking database. Begin work on vital signs data management program. Expand natural resource and stressor database to include justification statements and preliminary monitoring objectives.

Task B3.2- Gather data, build, and update an integrated GIS program

- Scheduled FY 2005 Activities: Continue to gather spatial information for SOPN parks. Create a list of prioritized GIS needs. Begin filling a list of needs by developing, purchasing, or finding spatial data.

Objective 4 Summarize and analyze existing information and concepts important for assessing current and future monitoring efforts and needs in the network parks.

Task B4.1- Summarize and analyze existing information.

- Scheduled FY 2005 Activities and Products: Have Texas A+M intern write natural resource park summaries. Hire additional intern to continue gathering relevant

scientific literature. Conduct literature review of major ecosystem types within SOPN. Develop and write Chapter 1 (Introduction and Background) for Phase I report.

Objective 5 Identify and prioritize all aquatic indicators (including climatic and atmospheric indicators), including the water quality component of the monitoring plan, and develop protocols and implement programs to monitor the Vital Signs.

Task B5.1- Development and Identification of Vital Signs

- Scheduled FY 2005 Activities and Products: Hold workshops by ecosystem. At these workshops subject matter experts and all network parks with a given ecosystem will be invited to attend. The conceptual model PIs will present a draft of their model for review and critique. This model review will also serve as a framework for the development of potential vital signs. In FY04 we created an access database that prioritized natural resources and stressors for all 11 parks individually and for the network as a whole. Potential vital signs with justification statements and preliminary monitoring objectives will be developed for each natural resource and stressor identified in our access database.

Task B5.2- Develop Conceptual Models

- Scheduled FY 2005 Activities and Products: Establish cooperative agreements and complete riparian and reservoir conceptual models. Cooperative agreements will include multiple opportunities for SOPN and network park staff to contribute and review the models. The cooperative agreement will also specify that the models will address the major natural resource concerns that have been identified in the access database.

Task B5.3- Develop Water Quality Program

- Scheduled FY 2005 Activities and Products: Continue to hold informal meetings with park staff that are actively involved in maintaining resource water quality within network parks. Work with park staff and Technical Committee to compile information on state-identified "impaired" (305b and 303d-listed) waters within network parks, compile information on state-identified outstanding waters, or special protection waters, compile information on other water bodies that are highly significant at the park or Network scale. Continue gathering relevant information on water quality monitoring within the SOPN boundaries. Work with park staff at LYJO to review proposal to study sedimentation of dams along the Pedernales River.

Task B5.4- Planning towards Completion of Monitoring Plan

- Scheduled FY 2005 Activities and Products: Develop a strategic plan that outlines the schedule and details for developing the Phase III final report that is due October 1, 2008. Decide on a vital signs selection process. Complete Phase I Vital Signs Monitoring report.

Objective 6 Identify and prioritize all terrestrial indicators (including climatic and atmospheric indicators), and develop protocols and implement programs to monitor Vital Signs.

Task B6.1- Development and Identification of Vital Signs

- Scheduled FY 2005 Activities and Products: Hold workshops by ecosystem. At these workshops all network parks with that ecosystem and subject matter experts will be invited to attend. The conceptual model PIs will present a draft of their model for review and critique. The model and review will also serve as a framework for the development of potential vital signs. In FY04 we created an access database that prioritized natural resources and stressors for all 11 parks individually and for the network as a whole. Potential vital signs with justification statements and preliminary objectives will be developed for each natural resource and stressor identified in our access database.

Task B6.2- Develop Conceptual Models

- Scheduled FY 2005 Activities and Products: Complete mixed-grass and short-grass conceptual models.

Task B6.3- Planning for Completion of Monitoring Plan

- Scheduled FY 2005 Activities and Products: Develop a strategic plan that outlines the schedule and details for developing the Phase III final report due October 1, 2008. Decide on a vital signs selection process. Complete Phase I Inventory and Monitoring report.

Objective 7 Develop and maintain strategies to share information with network parks, scientists, and others interested in the network's I&M program.

Task B7.1- Develop and maintain relationships with parks, other I&M networks, and research entities.

- Scheduled FY 2005 Activities and Products: Attend national and regional I+M meetings. Update webpage on at least a quarterly basis. SOPN is the lead for a multi-park proposal for prairie restoration submitted to the Servicewide Comprehensive Call that was selected to go forward for national competition. Continue to help with planning for 2005 National I+M Meeting in Austin, TX, including chairing a session on "Where to draw the line" for network staff. Encourage network approach for completing natural resource inventories (vegetation mapping, geologic resources, bats, etc.). Continue to promote SOPN and look for partnerships to increase our funding, effectiveness, and scientific understanding.

Task B7.2- Subject Expert Identification

- Scheduled FY 2005 Activities and Products: Invite subject matter experts to conceptual model workshops. In FY04 the SOPN Board decided not to have an overarching science advisory committee, but instead contact subject matter experts on an as-needed basis. SOPN will continue to keep track of subject-matter experts and

will be able to draw upon the expert databases at the four CESUs with connections to SOPN. Continue identifying and communicating with subject matter experts in a wide variety of roles.

III. Staffing

Inventory and Monitoring Staff

Bruce Bingham, Intermountain Regional Coordinator	(303) 987-6706
Dusty Perkins, Ph.D., Southern Plains Network Coordinator	(830) 868-7128 x 281
Heidi Sosinski, Southern Plains Network Data Manager	(830) 868-7128 x 282
Tomeyenne Zettner, Texas A+M University Intern	(512) 925-2406

Board of Directors

Mitzi Frank, Chair of Board 2005, (Supt., FOUN)	(505) 425-8025
Steve Linderer, (Supt., FOLS)	(620) 285-6911
Bruce Bingham, (IMR I&M Coordinator)	(303) 987-6706
Dusty Perkins, Ph.D., (SOPN Network Coordinator)	(830) 868-7128 x281
Karren Brown, (Supt. LAMR/ALFL)	(806) 857-3151
Alden Miller, (Chief of Resources and Facilities, WABA)	(580) 497-2742 x3
Gary Willson, Ph.D., Advisory Member, (Great Plains CESU)	(402) 472-5047
Gillian Bowser, Ph.D., Advisory Member, (Gulf Coast CESU)	(979) 845-9787

Technical Committee

Alden Miller, 2005 Chair, (Chief Resources + Facilities, WABA)	(580) 497-2742 x3
Paul Eubank, (Environ. Specialist, LAMR/ALFL)	(806) 857-0309
Ruben Andrade, (Supervisory Park Ranger, FOUN)	(505) 425-8025 x28
Steve Burrough, (Chief Resource Management, CHIC)	(580) 622-3161 x601
Brian Carey, (Chief Resource Mgmt. + Visitor Protection, LYJO)	(830) 868-7128 x232
Fran Pannebaker, (Natural Resource Specialist, BEOL)	(719) 383-5010 x16
Brian Quigley, (Chief Park Ranger, CAVO)	(505) 278-2201 x230
Felix Revello, (Supervisory Park Ranger, FOLS)	(620) 285-6911
Alexa Roberts, Ph.D., (Superintendent, SAND)	(719) 438-5916
Daniel Jacobs, (Chief Ranger, PECO)	(505) 757-2611 x231
Dusty Perkins, Ph.D. (Network Coordinator)	(830) 868-7128 x281

Cooperators/Partners

Dr. Jim Bergan, The Nature Conservancy – Inventories at LAMR, ALFL, LYJO
 Dr. Gillian Bowser, Gulf Coast CESU – Texas A+M Interns
 Sue Braumiller, NPS Intermountain/Midwest Hydrologist – Aquatic Conceptual Models
 David Hanni, Rocky Mountain Bird Observatory – SAND bird inventories
 Dr. Ann Hild, University of Wyoming – Grassland Conceptual Modeling
 Dr. Bruce Hoagland, Oklahoma Biological Survey – WABA plant inventories
 Dr. Jeff Kelly, Oklahoma Biological Survey – CHIC Inventories
 Dr. Guy Nesom, Botanical Research Institute of Texas – LAMR/ALFL plant inventories
 Dr. Roy Roath, Colorado State University – SAND plant inventory
 Dr. Tim Seastedt, University of Colorado – Advisor for SOPN Ph.D. Student

Dr. Greg Smith, Emporia State University – WABA bird inventories
Dr. Dan Tinker, University of Wyoming – Grassland Conceptual Modeling
Dr. Kathy Tonnessen, University of Montana – Vital signs planning

IV. USGS Protocol Development and Monitoring-Related Research Needs

- *Development of Vital Signs for restored grasslands* - Grassland systems and restoring degraded grasslands were identified during scoping sessions and subsequent ranking questionnaires sent to park staff as the most important natural resource issue for the Southern Plains Inventory and Monitoring Network (SOPN). Scoping sessions revealed that prairie restoration is either underway or is in the planning process at 9 of the 11 parks. The restoration and health of grasslands in the SOPN will play a major role in vital signs monitoring, however it is unclear what will be a good vital sign for prairie restoration. Prairie restoration in tall-grass systems has advanced dramatically in recent decades, however there has been considerably less restoration effort in mixed- and particularly short-grass systems. Grassland birds have been used by the Prairie Cluster as a vital sign in tallgrass systems and as an ecological indicator by Rocky Mountain Bird Observatory in short-grass systems. However many of the parks in the SOPN are small and therefore may not have a complete grassland bird community with sufficient numbers for monitoring even when fully restored. For this reason a new vital sign that can be monitored on small short-grass prairie fragments must be developed. Ideally the vital signs for restored prairie would dovetail on vital signs used for intact grassland fragments.

V. Budget Narrative

In FY05 SOPN is scheduled to receive \$225,700 in vital signs funding. SOPN will continue to fund two permanent positions, network coordinator and data manager, and allocate money to the host park (3.3% of total budget), LYJO, for administrative support. SOPN will establish cooperative agreements for a Ph.D. student at University of Colorado. This student will work for SOPN in the summer as an ecologist and eventually will develop protocols as part of their dissertation. SOPN will hold 2 conceptual model workshops and will certify vertebrate records. SOPN will fund an inventory of the arch wetland at BEOL and partially fund (55%) of a plant inventory at SAND that were both identified as high priority needs necessary for the development of vital signs. SOPN will also purchase additional office equipment and computers to provide workspace for the intern and Ph.D. positions. SOPN will continue to send staff to important meetings, training opportunities and I+M meetings. In FY05 SOPN is scheduled to receive the first year of water quality funding, \$29,000. This money will fund riverine and reservoir conceptual model and assist with holding a scoping and conceptual model workshop where potential vital signs will be developed.

VI. Budget Summary

FY05 Work Plan

Network: 26 Southern Plains

Category: 1_Income

<i>Description</i>	<i>\$ Amount</i>	<i>\$\$ Source</i>	<i>Where \$ Went</i>	<i>Comments</i>
Vital Signs	\$225,700.00	I&M - VS Monitoring	\$\$	
Water Quality	\$29,000.00	WRD - WQ Monitoring		
Subtotal	\$254,700.00			

Category: 2_Personnel

<i>Description</i>	<i>\$ Amount</i>	<i>\$\$ Source</i>	<i>Where \$ Went</i>	<i>Comments</i>
Data Manager Salary - GS 9	\$55,945.36	I&M - VS Monitoring	\$\$	NPS
Administrative - LYJO	\$8,500.00	I&M - VS Monitoring	\$\$	NPS
Network Coordinator - GS 12	\$81,646.84	I&M - VS Monitoring	\$\$	NPS
Subtotal	\$146,092.20			

Category: 3_Coop. Agreements

<i>Description</i>	<i>\$ Amount</i>	<i>\$\$ Source</i>	<i>Where \$ Went</i>	<i>Comments</i>
Sand Creek Vegetation	\$13,735.00	I&M - VS Monitoring	\$\$	University-CESU
Ph.D. Assistantship - Colorado	\$19,826.00	I&M - VS Monitoring	\$\$	University-CESU
Texas A+M Interns	\$3,000.00	I&M - VS Monitoring	\$\$	University-CESU
Bent's Old Fort Wetland Inventory	\$15,800.00	WRD - WQ Monitoring		University-CESU
Reservoir/Riverine Conceptual Model	\$13,200.00	WRD - WQ Monitoring		NPS
Subtotal	\$65,561.00			

Category: 4_Contracts

<i>Description</i>	<i>\$ Amount</i>	<i>\$\$ Source</i>	<i>Where \$ Went</i>	<i>Comments</i>
NPS Certification	\$6,000.00	I&M - VS Monitoring	\$\$	Other Federal
Housing for Ph.D. Student in Johnson City	\$578.06	I&M - VS Monitoring	\$\$	NPS
Subtotal	\$6,578.06			

Category: 5_Operations/Equipment

Description	\$ Amount	\$\$ Source	Where \$ Went	Comments
Vehicle	\$1,000.00	I&M - VS Monitoring \$\$	Other non-Federal	
Desk/office furniture	\$1,000.00	I&M - VS Monitoring \$\$	Other non-Federal	
Miscellaneous	\$568.74	I&M - VS Monitoring \$\$	Other non-Federal	
Office Supplies/Network Jacks	\$1,000.00	I&M - VS Monitoring \$\$	Other non-Federal	
Subtotal	\$3,568.74			

Category: 6_Travel

Description	\$ Amount	\$\$ Source	Where \$ Went	Comments
Data Manager Training	\$1,500.00	I&M - VS Monitoring \$\$	Other non-Federal	
Annual SOPN Meeting	\$7,000.00	I&M - VS Monitoring \$\$	Other non-Federal	
Ecosystem/Conceptual Model Workshops	\$21,200.00	I&M - VS Monitoring \$\$	Other non-Federal	
National I+M Meeting	\$1,200.00	I&M - VS Monitoring \$\$	Other non-Federal	
Coordinator Training	\$2,000.00	I&M - VS Monitoring \$\$	Other non-Federal	
Subtotal	\$32,900.00			

Budget Analysis

Analysis of Expenses by Where \$ Went

<i>Funding Source</i>	<i>Total \$\$</i>	<i>NPS</i>	<i>USGS</i>	<i>Other Federal</i>	<i>Univ.-CESU</i>	<i>Univ_Non-CESU</i>	<i>Other non-Federal</i>
I&M - VS Monitoring \$\$	\$225,700	\$146,670		\$6,000	\$36,561		\$36,469
WRD - WQ Monitoring	\$29,000	\$13,200			\$15,800		
Totals	\$254,700	\$159,870		\$6,000	\$52,361		\$36,469

Analysis of Expenses by Category

<i>Funding Source</i>	<i>Total \$\$</i>	<i>Personnel:</i>	<i>Coop Agree.</i>	<i>Contracts</i>	<i>Operations/Equip.</i>	<i>Travel</i>	<i>Other</i>
I&M - VS Monitoring \$\$	\$225,700	\$146,092	\$36,561	\$6,578	\$3,569	\$32,900	
WRD - WQ Monitoring	\$29,000		\$29,000				
Totals	\$254,700	\$146,092	\$65,561	\$6,578	\$3,569	\$32,900	

Expense Totals By Category

<i>Category</i>	<i>SubTotal</i>	<i>Percent</i>
2_Personnel	\$146,092	57.36%
3_Coop. Agreements	\$65,561	25.74%
4_Contracts	\$6,578	2.58%
5_Operations/Equipment	\$3,569	1.40%
6_Travel	\$32,900	12.92%
	\$254,700	